

4  
Cont  
B2  
Donald

a measuring step of measuring prior to said exposure, using the inspection pattern which is formed on said mask to be used in said exposure step, a line width of a pattern to be transferred onto said substrate.--

### REMARKS

Claims 2-8 and 11-22 are pending, by this Amendment, claims 2, 4-7 and 11 are amended, claim 1 and non-elected claims 9 and 10 are canceled, and claims 15-22 are added. No new matter has been added. Reconsideration in view of the above amendments and following remarks is respectfully requested. The attached Appendix includes marked-up copies of each rewritten claim (37 C.F.R. §1.121(c)(1)(ii)).

Applicant gratefully acknowledges that the Office Action indicates that claims 2-4 and 12-14 contain allowable subject matter. Claim 2 has been amended into independent form to include all of the features of canceled claim 1. Claims 4-7 have been amended to depend from claim 2. Thus, claims 2-8 and new claims 15-16, which depend from claim 2, are allowable.

#### I. INFORMATION DISCLOSURE STATEMENT

The Examiner is requested to consider and acknowledge (by initialing the Form PTO-1449) U.S. Patents 4,908,656 and 6,094,256 forwarded with the Information Disclosure Statement filed April 20, 2001. The Information Disclosure Statement was timely filed in that it was filed before issuance of the first Office Action on the merits. Thus, the references must be considered by the Patent Office. It appears that the Examiner inadvertently failed to place his initials adjacent to these references on the PTO-1449 enclosed with the Office Action. A copy of the partially initialed Form PTO-1449 is attached for consideration by the Examiner.

II. THE CLAIMS DEFINE PATENTABLE SUBJECT MATTER

The Office Action rejects claims 1, 5-8 and 11 under 35 U.S.C. §102(b) over U.S. Patent 6,166,412 to Tateno et al. As mentioned above, this rejection is moot as to claim 1, which has been canceled, and claims 5-8, which depend from allowable claim 2. This rejection is respectfully traversed as to claim 11.

Tateno discloses an exposure apparatus in which the exposure is carried out by superimposing a linear pattern TP1 of width L and a linear pattern TP2 of the same width L. See Tateno at, e.g., Figs. 1A and 4A.

Tateno fails to teach or suggest an arrangement in which the line width of the second linear pattern, which is superimposed on the image of the first linear pattern, is different from the line width of the first linear pattern, as recited in claim 11.

For at least the reasons discussed above, Applicant respectfully submits that Tateno fails to anticipate the subject matter of independent claim 11. Withdrawal of the rejection under 35 U.S.C. §102(b) is therefore respectfully solicited.

III. NEW CLAIMS

Claims 17-22 have been added and also are patentable. Tateno fails to teach or suggest that the "inspection pattern is formed in a separate area to a circuit pattern area in which said circuit pattern is formed," as recited in claim 17. This claim feature is similar to the feature recited in allowable dependent claim 4. Claims 18-22, which depend from claim 17 also are patentable for this reason.

IV. CONCLUSION

In view of the foregoing, Applicant respectfully submits that this application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicant's undersigned representative at the telephone number listed below.

Respectfully submitted,



Mario A. Costantino  
Registration No. 33,565

Robert Z. Evora  
Registration No. 47,356

MAC:RZE/dmw

Date: July 3, 2002

Attachments:

Appendix  
Petition for Extension of Time  
Partially Initialed Form PTO-1449

**OLIFF & BERRIDGE, PLC**  
**P.O. Box 19928**  
**Alexandria, Virginia 22320**  
**Telephone: (703) 836-6400**

<p><b>DEPOSIT ACCOUNT USE AUTHORIZATION</b> Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461</p>
---



## APPENDIX

Changes to Claims

Claims 1 and 9-10 are canceled.

Claims 15-22 are added.

The following are marked-up versions of the amended claims:

2. (Amended) A mask according to claim 1, comprising:

a circuit pattern to be transferred to a substrate via an optical system; and

an inspection pattern to be used for a measurement of a line width of a pattern

transferred to said substrate,

wherein said inspection pattern includes:

a first measurement pattern;

a second measurement pattern to be superimposed on an image of said first measurement pattern; and

an extraction pattern to be used for an extraction of a predetermined image from a superimposed image of said first measurement pattern and said second measurement pattern.

4. (Amended) A mask according to claim 1, wherein said ~~measurement~~inspection pattern is formed in a separate area to a circuit pattern area in which said circuit pattern is formed.

5. (Amended) A mask according to claim 1, wherein said ~~measurement~~inspection pattern is a part of said circuit pattern.

6. (Amended) A mask according to claim 1, wherein a line width of said ~~measurement~~inspection pattern corresponds to a line width of said circuit pattern.

RECEIVED  
JUL -9 2002  
TECHNOLOGY CENTER 2800

7. (Amended) An exposure method comprising:

an exposure step of transferring a circuit pattern of said mask of claim 1~~2~~ onto a photosensitive substrate via an optical system; and

a measurement step of measuring prior to said exposure step, using an inspection pattern which is formed on said mask to be used in said exposure step, a line width of a pattern to be transferred to said substrate.

11. (Amended) A mask comprising ~~a measurement pattern for a measurement of a line width of a circuit pattern to be transferred onto a substrate via an optical system,~~ wherein:

a base member;

~~said measurement pattern has a first linear pattern formed with~~ on said base member and which has a predetermined line width; and

a second linear pattern which is superimposed on an image of said first linear pattern and has a line width different from that of said first linear pattern.